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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/623,370

07/18/2003

Mark D. Tucker

SD-7250

3175

20567 7590 02/26/2007  
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EXAMINER

ANTHONY, JOSEPH DAVID

ART UNIT

PAPER NUMBER

1714

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

02/26/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No. 10/623,370	Applicant(s) TUCKER ET AL.	
	Examiner Joseph D. Anthony	Art Unit 1714	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12/11/06 as an amendment.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-9, 11, 17-20, 34, 35, 39-41 and 43-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-9, 11, 17-20, 34-35, 39-41, 43-45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## FINAL REJECTION AFTER FILING RCE

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 2-9, 17-20, 35 and 43-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tadros et al. WO 02/02192 A1 in view of Nakagawa et al. U.S. Patent Number 3,901,819.

WO teaches formulation for neutralization of chemical and biological toxants. The formulations may comprise mixtures of: 1) one or more of cationic surfactant, 2) long-chain fatty alcohol, 3) cationic hydrotrope, 4) an oxidant, such as hydrogen peroxide, sodium hypochlorite, calcium hypochlorite etc. and mixtures thereof, 5) an alkali metal bicarbonate peroxide activator (**Examiner note: alkali metal bicarbonate reads on applicant's claimed "sorbent additive" of all independent claims and the carbonate salt of independent claim 17**), 6) water soluble polymer, and 7) water, see abstract, page 8, lines 3-15, page 17, lines 15-25, examples and claims, such as claim 4.

WO differ from applicant's claimed invention in that there is no direct disclosure to the further addition of a bleaching activator selected from the group consisting of O-acetyl, N-acetyl, and nitrile group bleaching activators.

Nakagawa et al. teach a composition for activating an inorganic peroxide bleaching agent comprising (A) an acetic acid ester of a monosaccharide, a disaccharide, a sugar alcohol, an internal anhydride of a sugar alcohol, or erythritol, said ester having at least 2 ester groups on the adjacent carbon atoms, and (B) an acetic acid ester of a polyhydric alcohol having a melting point not higher than about 30.degree.C., the weight ratio of the components being within the range of from 1/9 to 9/1. These are O-acetyl type bleach activators. Nakagawa et al also teaches the conventional use of low water soluble tetracetyl ethylene diamine (TAED) which is a N-acetyl type bleach activator, see abstract, column 2, lines 1-29, Tables, and claims.

It would have been obvious to one having ordinary skill in the art to use the disclosure of Nakagawa et al to O-acetyl and N-acetyl bleach activators for inorganic peroxides, such as percarbonates, as motivation to actually add them as bleaching activators to the chemical and biological neutralization formulations taught by WO for the oxidation enhancement benefits such activators would provide for WO's oxidizing reactive component and the formulations as a whole.

3. Claims 11, 34 and 39-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tadros et al. WO 02/02192 A1 in view of Nakagawa et al. U.S.

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Patent Number 3,901,819 and further in view of Huth et al. U.S. Patent Number 6,448,062.

Tadros et al. and Nakagawa et al. have been described. This rejection builds on the rejections made above. Tadros et al. differ from applicant's claimed invention in that there is no direct disclosure to the further addition of polyol drying agents such as sorbitol.

Huth et al. teach a composition for simultaneous cleaning and decontaminating a device. The composition is a per-compound oxidant in an amount effective for decontaminating the device and an enzyme in an amount effective for cleaning the device. The device may be a medical device such as an endoscope or kidney dialyzer and a plurality of devices can be cleaned using the same composition. The composition may additionally contain a corrosion inhibitor in an amount effective to prevent corrosion of a metal, a chelator, a buffer, a dye and combinations thereof, see abstract, examples and claims. Huth et al directly discloses that it is well known in the art to use polyols, such as sorbitol, as drying agents in decontamination compositions, see column 20, lines 26-41.

It would have been obvious to one having ordinary skill in the art to use the disclosure of Huth et al to polyol drying agents for decontamination formulations as motivation to actually added polyols, such as sorbitol, to the decontamination formulations taught by the combination of Tadros et al. in view of Nakagawa et al. for the benefits that such drying agents would effect in said decontamination formulations.

***Response to Arguments***

4. Applicant's arguments filed 12/11/2006 with the amendment has been fully considered but is not persuasive to put the application in condition for allowance for the reasons set forth above. Additional examiner comments are set forth next.

The Examiner totally rejects applicant's assertion on page 12 of the Remarks, that neither Tadros nor Nakagawa, teach or even suggest applicant's specifically claimed species of sorbent additives as set forth in independent claims 17 and 35. Applicant's attention is drawn to Tadros disclosure of the use of either sodium hypochlorite and/or **calcium hypochlorite** as well known effective oxidizing additives for decontamination formulations for BW agents, see page 8, lines 3-15. Also see Tadros page 17, lines 15-25 wherein it is taught that sodium hypochlorite is taught as an effective additional oxidizing agent. The substitution of calcium hypochlorite for sodium hypochlorite is well motivated by the disclosure of Tadros. The fact that Tadros teaches calcium hypochlorite and sodium hypochlorite as oxidizing agents and not as "sorbent additives" is totally irrelevant, since Tadros clearly teaches the use of these two components in decontamination formulations. Applicant is reminded that the mere difference in reason for adding one material to another is not patentable, see *In re Lintner* 485 F.2d 1013, 173 USPQ 560 (CCPA 1972).

Applicant's argument that there is insufficient motivation to add Huth's teaching of polyols and/or sugar alcohol as drying agents, to the combination of Tadros in view of Nakagawa, is also rejected. The fact that Huth added his polyol drying agents to increase the shelf life of enzymes in peroxygen containing composition is true but such

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does not negate the use of Huth in the examiner's rejection. Huth teaches that the addition of polyols reduces the water in formulation, which inherently reduces the activation of the water-soluble peroxygen compound so that: 1) there is no exothermic reaction occurring during storage of the composition and 2) the peroxide does not degrade the enzymes during storage or prior to use (i.e. increases storage stability of the composition). The fact that such a reasons for adding the polyol is different from applicant's reasons for adding the polyol to his composition is acknowledge, but is really moot since Huth provides the ordinary artisan good and sufficient reasons to add a polyol as a drying agent to peroxide containing formulation. Thus the addition of such polyols to Tadros decontamination formula would be well motivated to increase the storage stability of the composition as a whole. Once again the courts have stated: "the mere difference in reason for adding one material to another is not patentable", see *In re Lintner* 485 F.2d 1013, 173 USPQ 560 (CCPA 1972).

The following statement was made in the previous office action and are repeated here because it is still deemed to be relevant to the pending claims.

"Applicant's arguments filed 07/26/06 with the amendment and RCE, have been fully considered but are not persuasive to put the application in condition for allowance for the reasons set forth above. Additional examiner comments are set forth next.

The prior-art rejections made over Tadros et al. WO 02/02192 A1 in view of the secondary reference(s) remain in effect since the effective filing date of the present application S.N. 10/623,370 is deemed to be the actual filing date of the application which is 07/18/2003, and NOT the filing date of Provisional Application Serial Number

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60/397,424 which is 07/19/2002. The examiner totally rejects applicant's arguments that the Provisional Applicant's statement of: *"This TA presents a convenient method to formulate DF-200 for practical use. It uses a highly sorbent material (sorbitol-a sugar alcohol) to 'dry out' the liquid peroxide activator (propylene glycol diacetate or glyderol diacetate). The activator becomes a free flowing powder which is more convenient to handle in the field"*, provides support for the full scope of all of applicant's claimed and disclosed species of "sorbent additives" as set forth in pending Application S.N.

10/623,370. The provisional application's disclosure of: *"a highly sorbent material (sorbitol-a sugar alcohol) to 'dry out' . . ."*, clearly enables only sorbitol as a highly sorbent material. If applicant had actually intended the (sorbitol-a sugar alcohol) to be a specific non-limiting example of a "sorbent material" in the Provisional Application, applicant would have written the above statement as followed:-- *It uses a highly sorbent material (e.g. sorbitol-a sugar alcohol) to 'dry out' out' the liquid peroxide activator (propylene glycol diacetate or glyderol diacetate)--*. Furthermore, nowhere in the Provisional Application is there any disclosure to any other species, besides sorbitol, of a material that is disclosed to be "highly sorbent material". The truth of the matter is that the phrase "a highly sorbent material" is nothing other than a functional description of the sorbitol species. Likewise, the phrase "a sugar alcohol" was used only to describe the class of compounds that sorbitol falls within. Sorbitol was thus NOT an example of a highly sorbent material, it was rather the only highly sorbent material enabled and disclosed by applicant's Provisional Application. Applicant's argument that applicant used similar phrases in the specification of S.N. 10/623,370 to indicate examples of



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highly sorbent materials is not well taken either. Applicant's attention is drawn to page 55, line 28 of applicant's specification wherein the following phrase is set forth: "1) place the sorbent additive (e.g. sorbitol powder) in a mixing vessel;" Notice that the said phrase used the term "e.g." to indicate that sorbitol was a specific example of a sorbent additive. Likewise, applicant's attention is drawn to page 56, lines 24-25 of applicant's specification wherein the following phrase is set forth: ", the amount of sorbent added (e.g. 40 g of sorbitol/SORBIGEM<sup>tm</sup>) is . . . ." Notice again that the said phrase used the term "e.g." to indicate that sorbitol was a specific example of a sorbent material added.

Please note that new claim 40 is rejected above, even though they require that the highly sorbent additive is sorbitol, because applicant's "Statement of Common Ownership under 35 USC 103(c)", filed on 11/08/05, does not make any mention to the WO 02/02192 A1 reference. As such, the prior-art rejection over this reference remains.

Finally, applicant's Terminal Disclaimers have been accepted by the PTO."

### **Conclusion**

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

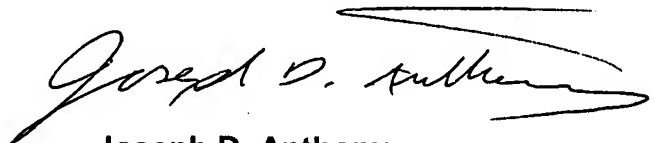
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Examiner Information***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Joseph D. Anthony whose telephone number is (571) 272-1117. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on (571) 272-1119. The centralized FAX machine number is (571) 273-8300. All other papers received by FAX will be treated as Official communications and cannot be immediately handled by the Examiner.



**Joseph D. Anthony**  
**Primary Patent Examiner**  
**Art Unit 1714**

2/20/07